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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,562	07/02/2003	Duwayne R. Anderson	7249 US 1	5488

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EXAMINER

VALENTIN, JUAN D

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 03/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.	Applicant(s)	
	10/613,562	ANDERSON, DUWAYNE R.	
	Examiner	Art Unit	
	Juan D. Valentin II	2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12 and 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/20/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 11/01/2004 have been fully considered but they are not persuasive. The rejection dated 8/26/2004 has been maintained and can be seen below. With regard to claim 12, applicant has argued on page 3 last paragraph-page 4 first paragraph of the Remarks section dated 11/01/2004, that Jiang does not disclose "coupling light along an optical axis from a beveled end of an fiber to an optical detector having a detector surface tilted with respect to the beveled end" (emphasis added). Jiang clearly discloses tilting the detector with respect to the beveled end, whether that respect is with regard to the same plane or a two-dimensional plane is not required since applicant has not claimed this limitation. In response to applicant's argument that the present invention addresses polarization-dependent responsivity (applicant's remarks page 4, lines 11-20), not misalignment as concluded by Examiner (as motivation to combine Jiang and He), the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Applicant has argued that the light containing a plurality of polarization states of He is directly emitted to the detector surface without passing through the beveled fiber first; Examiner finds this statement not persuasive and applicant is asked to please read paragraphs [0029 & 0093] for further clarification as to the polarization state of the light used to travel through the beveled fiber to the detector surface. With regards to applicants argument that Minamino does not disclose an adjustment method and is not

adjustable, applicant is specifically directed to col. 12, lines 58-61 which discloses an adjustment means.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Jiang et al. (USPN '050, hereinafter Jiang) in view of He et al. (USPAPN 2001/0048070, hereinafter He).

Claim 12

Jiang discloses in conjunction with Fig. 1, a method of adjusting a fiber pigtailed assembly (101) (col. 3, lines 46-39) for coupling light from an optical fiber (106) to an optical detector (104) with low back reflectance and minimum polarization-dependent responsivity. Jiang discloses the optical fiber having a beveled end (107) and having a diameter less than the area of a detector surface of the optical detector (col. 2, lines 51-58) so that the light from the beveled end impinges on the detector surface with low back reflectance. Jiang discloses the detector surface being tilted (col. 4, lines 8-33). Jiang further discloses the detector surface being tilted with respect to the beveled end (Fig. 4), while observing an electrical output from the optical detector for a minimum peak-to-peak value (col. 4, lines 34-57).

Jiang substantially teaches the claimed invention except that it fails to show a source of light having a plurality of polarization states and further adjusting a rotation angle between a

Art Unit: 2877

beveled end of the optical fiber and a detector surface of the optical detector adjacent the beveled end about an optical axis of the optical fiber while observing an electrical output from the optical detector for minimizing a peak-peak value. He shows that it is known to provide light having a plurality of polarization states and adjusting a rotation angle between a beveled end of the optical fiber and a detector surface of the optical detector adjacent the beveled end about an optical axis of the optical fiber while observing the electrical output of an optical detector [0029, 0083, & 0092-0096]. It would have been obvious to someone of ordinary skill in the art to combine the device of Jiang with the polarized light source and detector/fiber rotation along an optical axis of He for the purposes of providing polarization alignment between a fiber and optical component in order to reduce incidence of misalignment between the two (col. 1, lines 47-52).

The combination of Jiang in view of He clearly anticipates the claimed invention, this is evident as pointed out above in paragraph [0083] of He which states “The correct compensation (PDR) then would be achieved by rotating one or other of the fiber 112 and the detector 26 relative to the other around the optical axis OA...”. To further clarify the record, in paragraphs [0032-0035] further re-iterates this point with regards to Fig. 3 of He. With regards to Applicants argument on page 4 of the remarks section submitted 06/21/2004, it is noted Applicant does not specifically supply exactly what peak to peak value is minimized. Further it is obvious to someone of ordinary skill in the art at the time of the claimed invention that when trying to achieve a minimum amount of PDR as taught by He [0075], the electrical output of the optical detector will be monitored in order to insure the desired minimum and maximum peak detector outputs are monitored and correlated with one another to determine the desired system settings [0075].

2. Claim 13 rejected under 35 U.S.C. 103(a) as being unpatentable over Jiang in view of He and further in view of Minamino et al. (USPN '666 B1, hereinafter Minamino).

Claim 13

Jiang in view of He substantially teaches the claimed invention except that it fails to show further comprising means for adjusting a tilt angle of the detector surface with respect to the beveled end. Minamino shows that it is known to provide tilt-adjusting means (col. 12, line 52-col. 13, line 15) for a light-receiving module. It would have been obvious to someone of ordinary skill in the art to combine the device of Jiang in view of He with the tilt adjustment means of Minamino for the purposes of suppressing harmful influences due to light reflection (col. 13, lines 7-15).

It would be an obvious combination to someone of ordinary skill in the art at the time of the claimed invention to iterate **both** the rotation of the fiber as disclosed by He for compensating for polarization dependent response [0083] and the tilt angle between the fiber face and detector as taught by Minamino for the purposes of minimizing light reflections between the fiber and detector surfaces (col. 13, lines 7-15).

He in view of Jiang as applied above with respect to claim 12 and further in combination with Minamino as applied above in claim 13 discloses the claimed invention.

Conclusion

3. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

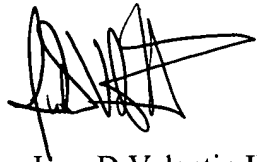
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan D. Valentin II whose telephone number is (571) 272-2433. The examiner can normally be reached on Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2877

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Juan D Valentin II
Examiner 2877
JDV
March 21, 2005



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